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NORTH BORNEO

Ad

ANNUAL REPORT OF THE DEPT. OF MED. SERVICES 1950.

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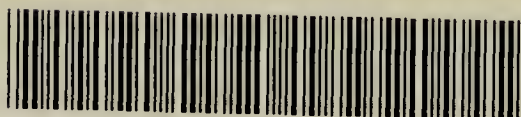
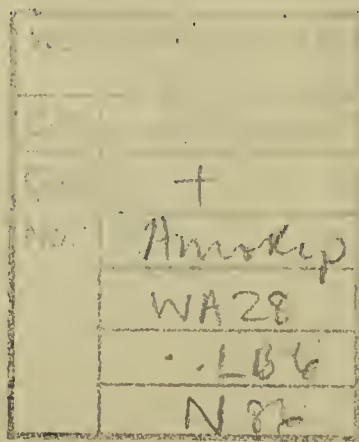
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PART I. GENERAL REMARKS.

L. Owing to the retirement of the Deputy Director of Medical Services in December, 1950 and the Director of Medical Services early in February, 1951 the present office holders of these posts are called up to report on the activities of the Medical Department over a period of which they have no knowledge. The report must be based on returns from outstations. These reports vary in quality and lack uniformity as between themselves and as between succeeding years. In compiling a report from individual returns it is evident that a complicated system of returns is baffling to the man in the field and accuracy can hardly be expected. It must be remembered that 60% of outpatients diagnoses is supplied from stations where there are no doctors. The best that should^{be}/attempted is to use the 50 causes of mortality and a much simpler morbidity return for the next five years.

2. The state of nutrition is thought to be better in 1950 than in 1949 though there are no reliable figures to support this. It cannot even be stated with any certainty that it is better than in pre-war times, for there is no trend of morbidity or mortality to be shown. It is known that the country is very much wealthier than before the war and one tends to conclude that it will be better nourished; but this totally disregards the customs and superstitions of people who, however wealthy, do not change their habits overnight on this account, and while one speaks specifically of nutrition much the same applies to the other great causes of morbidity and mortality.



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3. Town planning and rebuilding of war damaged areas continued and progress was made in some of the smaller towns, notably, Kota Belud and Tuaran where a 40 bedded hospital and a dispensary were completed respectively. No advance was made in the building of modern hospitals in Sandakan and Jesselton. These hospitals are urgently required more especially for the training of dressers, nursing staff, and midwives.

4. The medical supplies were sufficient for the needs of the Colony and two X-Ray sets were despatched at the end of the year from the United Kingdom. Jesselton, Sandakan and Labuan will now have these diagnostic facilities. These should be of great assistance in ~~future~~ tuberculosis work which it is hoped to commence in the future.

5. Kota Belud reported an influenza epidemic with 123 deaths. Another epidemic of dysentery was also reported from this area. One case of smallpox imported from the Celebes was recorded from Tawau.

6. Three UNICEF Sisters arrived in the middle of the year and have been of inestimable value in the training of dressers, nurses and midwives and also in public health and village health work. The UNICEF free milk distribution and Yaws campaign was put into action and greatly augmented the previous scheme which was introduced post war.

7. The Red Cross continued to provide great help to this department and it was through their good offices that the maternity and child welfare centre in Sandakan was able to have the services of a highly trained sister. The increasing attendances at these centres is an ample indication of the public's appreciation of these institutions.

8. The following legislation affecting the department was brought into operation during the year:-

- G/N No.54. Poisons and Deleterious Drug Rules, 1950
- Ordinance No.27 of 1949 - The Opium and Chandu Ordinance, 1949
- Ordinance No. 2 of 1950 - The Workmen's Compensation (Extension) Ordinance, 1950
- G/N No.14/1950 - The Town and Country Planning Ordinance, 1950
- G/N No.S133 - Beaufort Sanitary Board Special (Amendment) Bye-laws, 1950
- Tenom Sanitary Board Special (amendment) Bye-laws, 1950.

PART II. STAFF AND GENERAL ORGANISATION.

9. The Establishment of the Medical Service Staff consists of the following:-

- (1) Director of Medical Services
 - Deputy Director of Medical Services
 - Medical Officer of Health
 - Surgeon (vacant)
 - Dental Officer (vacant)
 - 11 Medical Officers (2 vacant)
 - 6 Nursing Sisters
 - 1 Health Visitor
 - 1 Medical Storekeeper Accountant.
- (2) Dr. H. Wands M.B.E., D.D.M.S. left the Colony on the 8th December, on leave pending retirement.
- (3) Dr. N.D. Paton was transferred from Keningau to Jesselton on the 21st April and retransferred to Labuan on the 14th August.
- (4) Dr. D.N. Gillies resigned from the service on the 1st September.

- (5) Dr. H. W. Wyile with his wife Dr. M.F.E. Morford who was employed on contract was granted vacation and study leave and left the Colony on the 25th April.
- (6) Dr. J.R.H. Pasqual was transferred from the Headquarters Staff to Kudat to relieve Dr. F. Heim who proceeded on leave on the 22nd February. The latter officer was posted to Keningau on the expiry of his leave 24th August.
- (7) Dr. A.M. Ozimek arrived in the Colony on the 10th June and was posted to Jesselton.
- (10) The shortage of medical officers persisted throughout the year, their numbers falling short of the Establishment by two at the best, but because of no leave reserve, the effective Establishment averaged about four less than the authorised Establishment. This situation was offset to a degree by the part time services of Dr. E. T. MacLaren a lady doctor with higher qualifications in Surgery, who visited Jesselton once a month for a few days, was available for consultation, and performed a number of operations on 'cold' cases. Dr. B.D. Ahmad a private practitioner further relieved the situation by giving some of his time to attend the Jail. Dr. Cranston of Lahad Datu, a private doctor employed by one of the companies, also lent his services to the Government. Dr. Morford as previously mentioned was employed on contract at Jesselton.
- (11) Miss Gannon, Nursing Sister, was transferred from Sandakan to Labuan on the 23rd May.
- (12) Miss Heath resigned on 6th April.
- (13) General Organisation: This is identically the same as the previous years report and a repetition is quite unnecessary. The general principles of the organisation suggested in the previous report are accepted and ^a separate Public Health branch working in close liason with the Medical Service with a unified control at the top is most desirable, but can hardly be expected for some time to come.

(14) A more effective control by the medical branch in matters of health and hygiene of the larger towns through the Sanitary Boards is necessary and this will be approached in the future.

PART III. GENERAL AND COMMUNICABLE DISEASES.

(15) General Diseases. The main cause of death in the Colony for 1950 was malaria, the number being 765. Pneumonia was responsible for 679 deaths and tuberculosis of the lungs for 468.

(16) Pneumonia. The greatest number of Pneumonia deaths were recorded from Ranau and Tambunan, possibly due to concomitant malaria and the poor economic condition of the people in these localities.

(17) Tuberculosis. Tuberculosis deaths were fairly evenly distributed throughout the Colony and this disease presents a difficult problem. Plans were made for the segregation of known cases, who were infectious, but for whom no further institutional treatment would be any use. This might help to reduce some of the many foci of infection but would only serve the main towns. It is difficult to assess the incidence of tuberculosis, as accurate figures can only be obtained from hospital admissions where only advanced cases are seen. The majority of sufferers cannot afford to leave their work or cultivation, and, a few who can afford it, prefer to seek the advice and treatment with streptomycin or Para-amino-salicylic acid in the hands of Private Practitioners.

(18) Mortality from Pulmonary Tuberculosis is on the increase as is shown in Appendix A. It is interesting to note in the Perry Report of 1912 that tuberculosis is not even mentioned in the section "Principal Diseases in British North Borneo". In 1937 tuberculosis accounted for 23 deaths and the population at that time was estimated at 299,311, whereas in 1949 with an estimated

population of 344,500, deaths from tuberculosis numbered 400. It will be seen that while there has been an increase of 15% in the population the increase of deaths from tuberculosis has mounted to 1,600%.

(19) Malaria. The situation regarding this disease is the same as shown in previous reports. It is still the most killing disease in the Colony. In places where antimalarial work is carried out with oiling - D.D.T. and paludrine the results have been most gratifying but the problem in villages remains the same. The Malaria Research Unit continued throughout the year and gave valuable information from time to time.

(20) Smallpox. One case was reported from Tawau. This was an imported case and 18,078 vaccinations were carried out. There was no spread of the disease. The Medical officers in ports were on the alert for imported cases especially from Indonesia.

(21) Leprosy. 13 admissions and six deaths were reported for the year. All leprosy cases are treated at Berhala Island near Sandakan. Suitable patients are treated with Sulphetrone and an accurate record of their progress is kept supported by photographs taken at intervals. The results of this treatment are most satisfactory and are reflected in the great hope of cure shown by the unfortunate sufferers of this disease.

(22) Vitamin Deficiency. shows a drop in numbers of admissions and deaths even compared with prewar figures. In 1938 there were 356 admissions with 34 deaths as compared with 80 admissions and 8 deaths in 1950.

(23) Typhoid and the enteric group of diseases presented no problem. This is surprising in view of the complete lack of sanitation and hygiene that obtains in practically all villages and indeed some of the rebuilt areas. The possibility of an outbreak of diseases of the enteric group should be borne in mind in all Town-planning Schemes and the opinion of the Medical Officer

of Health should be carefully considered especially in regard to water supplies and sanitation.

(24) Poliomyelitis. 9 cases were reported for the year 1950 with one death. There was nothing to suggest any outbreak and there were no reports from our neighbouring countries which might have caused alarm.

(25) Diphtheria. 4 cases were reported in the Colony with one death. These were all diagnosed clinically. A central laboratory for the Colony is a long felt want and this has been planned when the Jesselton hospital is built. The future extensions of air communications in the Colony will be of considerable help in aiding the rapid diagnosis of diseases of this nature.

(26) Tetanus. Inpatient returns show 24 admissions with 10 deaths. 16 of these admissions were reported from Labuan with 5 deaths and 4 from Papar with 3 deaths. This high death rate was probably due to the delay in seeking medical treatment which, at its best, is of small value when the infection is well established.

(27) Ulcer (Tropical). The total number of inpatients amounted to 553 and the total of outpatients 36,252 of which 17,149 were first attendances. The outpatient attendance shows a considerable drop as compared with the previous year's figure of 61,206 though the inpatients total remains substantially the same. Medical opinion is that this is due to an improvement in the nutrition factor.

(28) Yaws. The figures for inpatients and outpatients show little difference as compared with the previous year. Some results may be expected in the next year's report as the UNICEF campaign against yaws in women and children was inaugurated in December, 1950. "May be expected" is repeated, for although considerable efforts have been made it is merely scratching the surface, as the disease is so widely prevalent that it will be difficult, if not impossible, for touring dressers to reach and administer two concentrated injections of penicillin with a weeks interval in the more remote villages, which now constitutes the accepted mass treatment.

PART IV. VITAL STATISTICS.

(29) Vital Statistics continue to be based on returns of doubtful accuracy and completeness. Nevertheless, with the exception of the Infant Mortality Rate, the omens appear favourable. The Birth Rate increased to 26.44 and the Death Rate declined further to 11.81. These rates are based on an estimated midyear population of 349,500. As there has been no census since 1931, there may be a large error in this estimate.

(30) The Infant Mortality Rate is recorded as 108 per 1000 live births. Sample surveys make it appear that this rate should be in the region of 200 and indeed in some areas of the interior it would appear to approach 400. It is probable that the Maternal Mortality Rate of 5.75 more closely approaches accuracy.

(31) Preparations were completed during the year for a new Births and Deaths Registration Ordinance and it is felt that this combined with the census in 1951 will improve statistics considerably.

(32) Vital Statistics (absolute figures).

Estimated Population at the end of 1950	352,000
Estimated Population at the middle of 1950	349,500
Total Registered Births (excluding stillbirths)	9,241
Total Registered Deaths " "	4,126
Total Registered Stillbirths	145
Total Deaths infants under 1 month	345
Total Deaths infants under 1 year	1,006
Total Deaths Women attributable to Puerperal causes	54

(33) Rates.

Birth Rate (Live-births per 1,000 mid-year population.)	26.44
Death Rate (Deaths " " " ")	11.81
Infantile Mortality (Deaths infants under 1 year per Rate) 1,000 live-births registered in 1949)	108.86
Neonatal Death Rate (Deaths infants under 1 month per 1,000 live-births registered in 1949)	37.33
Maternal Mortality (Deaths from puerperal causes per Rate) 1,000 live and stillbirths)	5.75
Stillbirths Rate (per 1,000 live and stillbirths).	15.44

(34) Comparative figures for : 1947, 1948, 1949, 1950.

	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>
Total Recorded Births	6,630	6,716	8,145	9,241
Crude Birth Rate	19.58	19.62	23.29	26.44
Total Recorded Deaths	5,126	4,552	4,717	4,126
Crude Death Rate	15.11	13.30	12.34	11.81
Total Infant Deaths	-	868	835	1,006
Infant Mortality Rate	-	136.00	105.50	108.86
Maternal Mortality Rate	11.44	10.05	9.08	5.75

(35) Principal Recorded Causes of Deaths.

	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>
Tuberculosis	286	445	400	479
Dysentery & Diarrhoea	194	237	251	337
Malaria	550	574	649	765
Fever	420	720	569	-
Pneumonia	680	811	642	679
Malnutrition	86	59	70	47
Violence	69	100	90	92
Senility	250	312	308	416
Cancer	-	32	37	38
Total Recorded Deaths	5,126	4,552	4,717	4,126

PART V. INSTITUTIONS.

(36) Hospitals:- The following gives the number and type of beds available at various hospitals :-

<u>Location</u>	<u>Number and Category of Beds.</u>			
	<u>General.</u>	<u>Obstetric.</u>	<u>Tuberculosis.</u>	<u>Infectious.</u>
Jesselton	99	6	21	-
Papar	52	-	14	-
Beaufort	44	3	4	3
Keningau	36	2	10	2
Kota Belud	36	4	-	8
Labuan	54	2	8	5
Tawau	50	10	12	4
Lahad Datu	46	-	4	-
Semporna	10	-	-	-
Sandakan	79	6	10	10
Mental	100	-	-	-
Leper	55	-	-	-

(37) As previously reported the main hospitals are purely of a temporary structure. They are neither suitable for treatment nor training. This situation cannot be avoided at present in view of the vast building programme necessary for this much war damaged Colony. However, plans have been drawn up for the rebuilding of the main hospitals in Sandakan and Jesselton and it is hoped that the Sandakan hospital which rightly deserves a high priority will be the first to be commenced in 1951.

(38) Maternity and Child Welfare.

Centres. During the year Government ran three main Maternity and Child Welfare Centres in Jesselton, Sandakan and Keningau Towns, and also - subcentres in outlying towns. Welfare Centre buildings are primitive wooden structures. In addition to accommodating Maternity and Child Welfare Clinics, Yaws, Tuberculosis and a number of other health activities are conducted in or from these clinic buildings. The subcentres are accommodated in dispensary buildings used for other purposes, but the clinics are run by health staff. During clinics, existing accommodation is overcrowded. New centres were however planned during the year.

(39) Staff. These centres are staffed, equipped and maintained by Government at an annual cost (exclusive of drugs) of \$43,807. Government also supplies transport for domiciliary work. The Government staff consisted on 1.12.50 of

- 1 European health visitor.
- 2 Senior staff nurse midwives
- 2 Staff nurses
- 9 Trained midwives
- 22 Pupil midwives.

During the year the British Red Cross Society loaned the services of a European health visitor. And later very great assistance were forthcoming from UNICEF. This organisation supplied, in addition to considerable quantities of much needed equipment, the services of a European health visitor and nurse midwife.

/Each.

Each of the major health centres was therefore staffed by a highly qualified health visitor, Government at Keningau, Red Cross at Sandakan and UNICEF at Jesselton.

(40) Attendance. The total attendance during 1950 at these clinics was 23,767, a summary of Maternity and Child Welfare Work done during the year is shown in Appendix B.

(41) Training. Classroom accommodation and training equipment at Jesselton were greatly improved due largely to UNICEF assistance. A substantial library was started; models, charts and epidiascopes became available. The lecture syllabus was extended and improved by the UNICEF Tutor Sister.

(42) Training at Keningau remains difficult as the pupils there are recruited mainly from the hill tribes and instruction is in the vernacular. No classroom is available and training is in the form of apprenticeship. Government were fortunate in having the services of a health visitor whose long experience of local conditions, and knowledge of local dialects have been of great value. She has pioneered the way.

(43) Nature of Work. The Staff undertakes clinics at the centres and subcentres and domiciliary visits to the surrounding areas. At the clinics women and children attending for the first time are registered and documented. The clerical work in this connection is usually carried out by voluntary workers to whom much praise is due. Initial and subsequent periodical examinations are carried out and recorded. Such pregnancies as were "booked" were attended free. A post natal and infant welfare service is also provided. Maternity and child welfare is closely linked with the nutrition, tuberculosis, malaria, school health and environmental hygiene organisations. All malaria cases for example are reported to the antimalarial assistant who has the house, in which the case occurred, sprayed with D.D.T. by the antimalaria squad. In case of tuberculosis overcrowding is dealt with through sanitary inspectors.

(44) An important part of the work is domiciliary visiting. This, however, cannot be called exclusively Maternity and Child Welfare Work as such visits unearth cases of tuberculosis, yaws, malaria, etc., which are referred to appropriate sections of the service. This domiciliary service is also of use in case "holding" and in tracing contacts of infectious diseases.

(45) The Maternity and Child Welfare Staff make the necessary arrangements for hospitalization of cases requiring it. Propaganda, Health Education and immunizations are also conducted by this staff.

PART VI. HYGIENE AND SANITATION.

(46) 1. General. The increased prosperity, occasioned by the boom in primary commodities, was reflected in improved dress and personal cleanliness but not in improved sanitation. The Colony has, however, throughout the year been free from major epidemics which might have been expected from primitive sanitation. Nevertheless, excremental diseases in the form of highly endemic amoebiasis and helminthic infection continue to sap the energy and initiative of the majority and retard the growth and development of such children that survive infancy.

(47) 2. Housing. This department is intimately concerned with the maintenance of certain minimum hygienic standards. In this connection two groups of diseases namely tuberculosis and bowel complaints are profoundly affected by the housing conditions of a community. It has not been possible except in sanitary board areas to exercise adequate control over either existing housing or new construction.

(48) (a) Rural Housing. The poor man's dwelling consists of a bamboo or kajang shell raised on wooden posts. While such a house need not necessarily be unsatisfactory from the point of view of comfort and hygienic construction there are certain essential requirements which must be met. These include the provision of more than one room to each house, the exact number

/depending.

depending on the size of the family, adequate light and ventilation, cooking and washing facilities and a latrine. It is considered that these should be the minimum requirements of a habitable house. Further provision is required for the removal of manure and garbage and for protection from cattle, pigs and poultry. At present few houses in rural areas comply with such minimal requirements. Latrines are rarely found and water supplies are vulnerable to gross pollution.

(49) (b) Urban areas. During the year draft town plans for most towns in the Colony were prepared and passed through various stages pending final approval. New draft building byelaws were drawn up. The plans and byelaws provided for an improved standard shop house design "sanitary lanes" have been abolished. The system of sewage disposal was not however finally decided. In this connection the provision of an adequate supply of piped water has assumed prime importance. Without such a supply modern houses with all their advantages in health and convenience will be impossible.

(50) Two other factors affect the decision as to the type of sewage disposal to be adopted. Firstly a smaller and more fastidious labour force is making conservancy methods increasingly difficult expensive and inefficient, and secondly a mounting opinion, evidenced throughout the year, on the part of unofficial members of sanitary boards as to the desirability of modern sanitation and expressed willingness and ability to pay for it. In this connection it may be noted that except for Sandakan the sewerage rates permitted by the Sanitary Boards Ordinance have not been levied.

(51) Overcrowding in urban areas with its sequelae continued to be a matter for concern to this department and of profit to certain householders. Adequate byelaws exist but in the absence

of sufficient alternative accommodation, their enforcement is hardly justifiable. In the later part of the year domiciliary visits and advice by Health Visitors to tuberculosis cases in such overcrowded dwellings materially reduced the risks.

(52) 3. Water Supplies. As mentioned above, in view of the rebuilding of new towns, the provision of an adequate piped water supply has become an urgent necessity. During the year a fifth town namely Lahad Datu received a piped water supply albeit untreated and from a stream of doubtful purity. In all piped supplies, clarity and purity remain capricious being dependant on improvised methods of treatment. This capriciousness is further increased by intermittent supply and leaking mains.

(53) Throughout the Colony generally water is drawn by hand from shallow wells and streams. Professional water carriers ply in many towns. There appears to be a great need for properly constructed village wells and pumps, both as a health measure and as an economy in labour.

(54) 4. Health Education. Hygiene classes form part of the syllabus of the normal school curriculum. The medical examinations conducted together with visits by health staff and vaccinators are in themselves an education and experience to most children.

(55) As regard adult education, pamphlets and instructions were issued from maternity centres, village surveys attracted interest and enquiry and advantage was taken of native gatherings in staging health exhibits.

(56) There is however enormous leeway to be made up in this subject. Assistance from UNICEF was obtained late in the year in the form of instruction of apparatus and material.

(57) 5. Schools. No separate school medical service existed during the year, however, 2072 school children were medically examined and medical history sheets instituted. Information as

to weight, height, sight, hearing and nutrition was recorded in the sheets. Provision was made for treatment and supervision of defects, though the follow up still leaves a lot to be desired.

(58) The incidence of dental caries continues to be high and dental treatment is badly needed. The incidence of helminthiasis varied from 80% to 20% being highest in rural schools. Weights and heights were in general far below those given as standard elsewhere. About 60% were considered to be nutritionally sub-standard by the examiners.

(59) The Education School Building Rules 1949 have caused improvements in the general environment and sanitation of several schools.

(60) There is no school meal service as yet, however, 10½ tons of Skim Milk powder, allocated by UNICEF, was distributed through schools during 1950. Such milk at the rate of 50 grammes per head per day was prepared and consumed at the schools. An assessment of the benefits of this scheme will be awaited with interest.

(61) The syllabus includes a generous time allocation to physical training and instruction in hygiene.

(62) No special provision exists as yet for mentally or physically handicapped children.

(63) 6. Nutrition. The imposition of price control appears to have affected the distribution of supplies of fish, meat, eggs and fresh vegetables in that, smaller quantities of these were available in public markets in towns. The lack of these was however cushioned to some extent by increased imports of frozen and canned foods.

(64) Labuk and the sago eating districts in the Klias peninsula continued to report isolated cases of beri-beri.

(65) A survey was conducted during the year on the costs of adequately balanced diets and the results placed at the disposal of a Cost of Living Committee.

(66) Feeding of Vulnerable groups. Children, nursing and pregnant women benefited from a free distribution of UNICEF milk and Government Red Palm Oil and yeast. The followed were distributed during the year.

Through Schools:-	22,735 lbs Skim Milk Powder
Through Health Centres and Hospitals:-	20,000 lbs Skim Milk Powder
	7,020 lbs Whole Milk Powder
	525 gallons Red Palm Oil
	430 lbs Dried yeast.

PART VII. TRAINING OF HEALTH AND MEDICAL PERSONNEL.

(67) In reporting on this aspect of the medical programme for the year, one must face facts, and realise the various factors which have hindered progress on this most important facet of the medical reorganisation in the Colony:-

Firstly, the standard of education required before admission to the different sections of training is necessarily high and at present candidates from schools have not been able to achieve this proficiency in sufficient numbers.

Secondly, the easy money that can be earned in the present 'boom', side tracks some possible candidates.

Thirdly, the primitive conditions under which our students have to be taught must reflect on the finished product. The primitive conditions in which students have to be housed cannot but fail to attract the right type.

(68) A good beginning has been made in having the valuable services of an excellent training staff supplied by UNICEF and when projected the hospitals at Sandakan and Jesselton are completed Borneo should be able to produce a tolerably good medical service.

Deaths 1950 by Disease, Age and Sex.

International Detailed List Numbers.	Cause Groups.	Under 1 month.	1 month to 1 year.	1 - 4 years.	5 - 14 years.	15 - 24 years.	25 - 44 years.	45 - 64 years.	Over 65 years.	Totals.
		M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	
001-008	Tuberculosis of Respiratory system	-	1	1	2	23	128	143	35	468
010-095	Tuberculosis other forms	-	1	1	1	2	1	1	-	11
020-029	Syphilis and its sequelae	-	-	-	-	-	1	2	1	4
040	Typhoid fever	-	-	-	-	1	1	-	-	2
043	Cholera	-	-	-	-	-	-	-	-	0
045-048	Dysentery, all forms	1	1	9	7	5	19	10	6	92
050-051	Scarlet fever and streptococcal sore throat	-	-	-	-	-	-	-	-	0
055	Diphtheria	-	1	2	1	-	1	2	-	7
056	Whooping cough	-	1	-	1	-	-	-	-	2
057-	Meningococcal infections	-	-	-	-	-	-	-	-	0
058	Plague	-	-	-	-	-	-	-	-	0
080	Acute Poliomyelitis	-	-	-	1	-	-	-	-	1
084	Smallpox	-	-	-	-	-	-	-	-	0
085	Measles	1	-	-	-	-	-	-	-	1
100-108	Typhus and other Rickettsial Diseases	-	-	-	-	-	-	-	-	0
110-117	Malaria	12	9	86	64	72	94	46	35	765
-	All other diseases classified as infective or parasitic	3	4	1	2	3	3	4	2	57

APPENDIX A.

- 2 -

International Detailed List Numbers.	Cause Groups.	Under 1 month.	1 month to 1 year.	1 - 4 years.	5 - 14 years.	15 - 24 years.	25 - 44 years.	45 - 64 years.	Over 65 years.	Totals.
		M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	
140-205	Malignant Neoplasms	-	-	-	1	1	8	6	10	38
210-239	Benign & Unspecified Neoplasms	-	-	-	-	1	-	-	-	1
260	Diabetes Millitus	-	-	-	-	-	-	1	1	3
280-286	Beri beri, Pellagra, Scurvy.	-	3	-	3	2	14	4	6	47
290-293	Anaemias	-	3	1	1	-	3	4	3	19
330-334	Vascular lesions infecting C.N.S.	-	-	-	-	-	2	1	1	6
340	Non-meningococcal meningitis	2	-	-	2	1	3	-	1	11
400-402	Rheumatic fever	-	-	-	-	-	-	-	-	0
410-416	Chronic rheumatic Heart Disease	-	-	-	-	-	1	-	-	2
420-422	Arterio sclerotic and degenerative heart disease	-	-	-	-	-	-	-	1	3
430-434	Other diseases of the heart	-	-	-	2	3	7	10	8	46
440-443	Hypertension with heart disease	-	-	-	-	-	-	-	-	0
444-447	Hypertension without mention of heart	-	-	-	-	-	-	-	-	1
480-483	Influenza	4	10	11	7	8	18	18	9	129
490-493	Pneumonia	12	14	74	48	38	134	76	78	679

International Detailed List Numbers.	Cause Groups.	Under 1 month.		1 month to 1 year.		1 - 4 years.		5 - 14 years.		15 - 24 years.		25 - 44 years.		45 - 64 years.		65 years.		Totals.
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
500-502	Bronchitis	3	2	3	2	3	-	1	-	6	7	8	2	4	1	-	-	40
540-541	Ulcer of stomach and duodenum	-	-	-	-	-	-	-	-	-	1	4	3	1	-	-	-	9
550-553	Appendicitis	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
560,561, 570	Intestinal obstruction and hernia	-	-	2	1	1	-	-	-	-	-	-	-	-	-	-	-	4
543,571, 572	Gastritis Enteritis, Colitis except diarrhoea of the newborn	1	3	57	40	24	37	5	6	5	2	6	3	5	6	2	2	204
581	Cirrhosis of liver	-	-	-	-	-	-	-	-	-	-	5	-	7	-	-	-	12
590-594	Nephritis and Nephrosis	-	-	-	-	1	-	2	2	5	-	13	12	10	5	1	1	52
610	Hyperplasia of Prostate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
640-652 670-689	Complications of pregnancy childbirth & the puerperium	-	-	-	-	-	-	-	-	-	7	-	42	-	5	-	-	54
750-759	Congenital malformations	7	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	9
760-762	Birth injuries, post natal asphyxia and atelectases	12	10	1	-	-	-	-	-	-	-	1	1	-	-	-	-	25
763-768	Infections of the newborn	13	5	12	10	-	-	-	-	-	-	-	-	-	-	-	-	40
769-776	Other diseases peculiar to early infants and immaturity unqualified	118	71	66	32	3	3	-	-	-	-	-	-	-	-	-	-	293
780-795	Senility without mention of psychosis, ill defined and unknown causes	-	-	-	-	-	-	-	-	-	1	2	2	58	61	155	137	416

APPENDIX A.

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International Detailed List Numbers.	Cause Groups.	Under 1 month. M.. F.	1 month to 1 year. M. F.	1 - 4 years. M. F.	5 - 14 years. M. F.	15 - 24 years. M. F.	25 - 44 years. M. F.	45 - 64 years. M. F.	Over 65 years. M. F.	Totals.
-	All other diseases	21 11	70 49	40 32	17 25	9 20	55 59	32 24	11 3	478
N800-N829	Fractures, head injuries	-	-	1 1	3 -	4 2	16 3	5 -	1 1	37
N850-N869	and internal injuries	-	-	1 1	1 -	- -	- -	- -	- -	2
N940-N949	Burns	-	-	- -	- -	1 3	3 3	2 2	1 -	27
N990	Drowning	-	-	2 -	3 7	1 3	- -	1 1	- -	2
N960-N979	Effects of poisons	-	-	- -	- -	1 -	- -	- -	- -	2
-	All other injuries	-	2 -	2 -	1 2	3 -	7 2	5 -	- -	24
-	Stillbirths	77 68	- -	- -	- -	- -	- -	- -	- -	145
Total		287 203	398 263	211 197	144 145	144 137	564 423	461 269	238 187	4,271

DEATHS 1950 BY DISEASE AND LOCALITY.

[illegible]

International Detailed List Cause Groups. Numbers.	Jesselton	Mengatlat	Buit	Tenghilan	Tuaran	Papar	Beaufort	Weston	Sipitang	Mempakul	Kuala Penyu	Tenom	Pensiangan	Sipulot	Keningau	Tambunan	Ranau	Bundu Tuhau	Kota Belud	Kudat	Sandakan	Lehad Datu	Simporna	Tawau	Labuan	Estates	Total
110-117 Malaria	1	9	7	6	39	89	42	2	18	3	12	32	7	1	24	46	36	36	117	64	100	8	8	47	11	-	765
All other diseases classified as infec- tive or parasitic.	10	2	-	1	2	5	1	-	2	-	12	-	1	1	-	3	-	-	1	-	10	2	1	3	-	-	57
140-205 Malignant Neoplasms	9	-	-	-	-	-	3	-	-	-	-	1	-	-	-	-	-	-	-	2	17	3	-	2	1	-	38
210-239 Benign & unspecified neoplasms.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
260 Diabetes Millitus	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	1	-	-	-	-	3	
280-286 Beri beri	2	-	-	1	6	1	5	-	3	1	3	-	-	-	-	-	-	1	-	-	16	2	-	4	2	-	47
290-293 Anaemias	5	-	2	-	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-	1	7	-	-	-	-	19	
330-334 Vascular lesions infecting C.N.S.	4	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	6	
340 Non meningococcal meningitis.	1	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	1	2	3	-	-	1	11	
400-402 Rheumatic fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
410-416 Chronic rheumatic heart disease.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2	
420-422 Arterio sclerotic and degenerative heart disease.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	3	
430-434 Other diseases of the heart.	7	-	2	-	1	2	7	-	-	-	-	2	-	-	-	12	-	-	1	1	6	-	2	2	1	46	

International Detailed List Cause Groups. Numbers.	Jesselton	Mengattal	Buit	Tenghilan	Tuaran	Papar	Beaufort	Weston	Sipitang	Mempakul	Kuala Penyu	Tenom	Pensiangan	Sipulot	Keningau	Tambunan	Ranau	Bundu Tuhan	Kota Belud	Kudat	Sandakan	Lahad Datu	Simborna	Tawau	Labuan	Estates	Total
440-443 Hypertension with heart disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
444-447 Hypertension without mention of heart	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
480-483 Influenza	-	-	-	-	1	-	4	-	-	-	-	-	-	-	-	-	-	-	123	-	1	-	-	-	-	129	
490-493 Pneumonia	21	-	9	11	32	33	9	10	19	-	15	38	10	20	31	98	85	42	50	50	57	10	16	10	3	-	679
500-502 Bronchitis	4	3	-	-	-	7	-	-	2	-	-	1	-	-	1	-	-	1	19	-	2	-	-	2	-	42	
540-541 Ulcer of stomach and duodenum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3	1	2	-	9	
550-553 Appendicitis	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
560,561, Intestinal obstruction and hernia	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	1	-	-	4	
543,571, Gastritis Enteritis, Colitis except diarrhoea of the newborn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
581 Mirrhosis of liver	17	5	1	1	11	4	6	1	10	4	12	5	-	3	3	28	29	-	20	11	27	-	3	-	3	204	
590-594 Nephritis &nephrosis	5	-	-	-	1	2	1	1	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	12	
610 Hyperplasia of Prostate	9	2	2	-	-	-	2	1	-	1	4	1	-	-	1	2	-	-	2	2	16	4	1	2	-	52	
640-652 Complications of pregnancy childbirth and the puerperium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
670-689	7	1	1	1	2	1	1	-	3	2	-	4	1	1	-	3	2	1	10	1	7	1	2	2	-	54	

APPENDIX A.

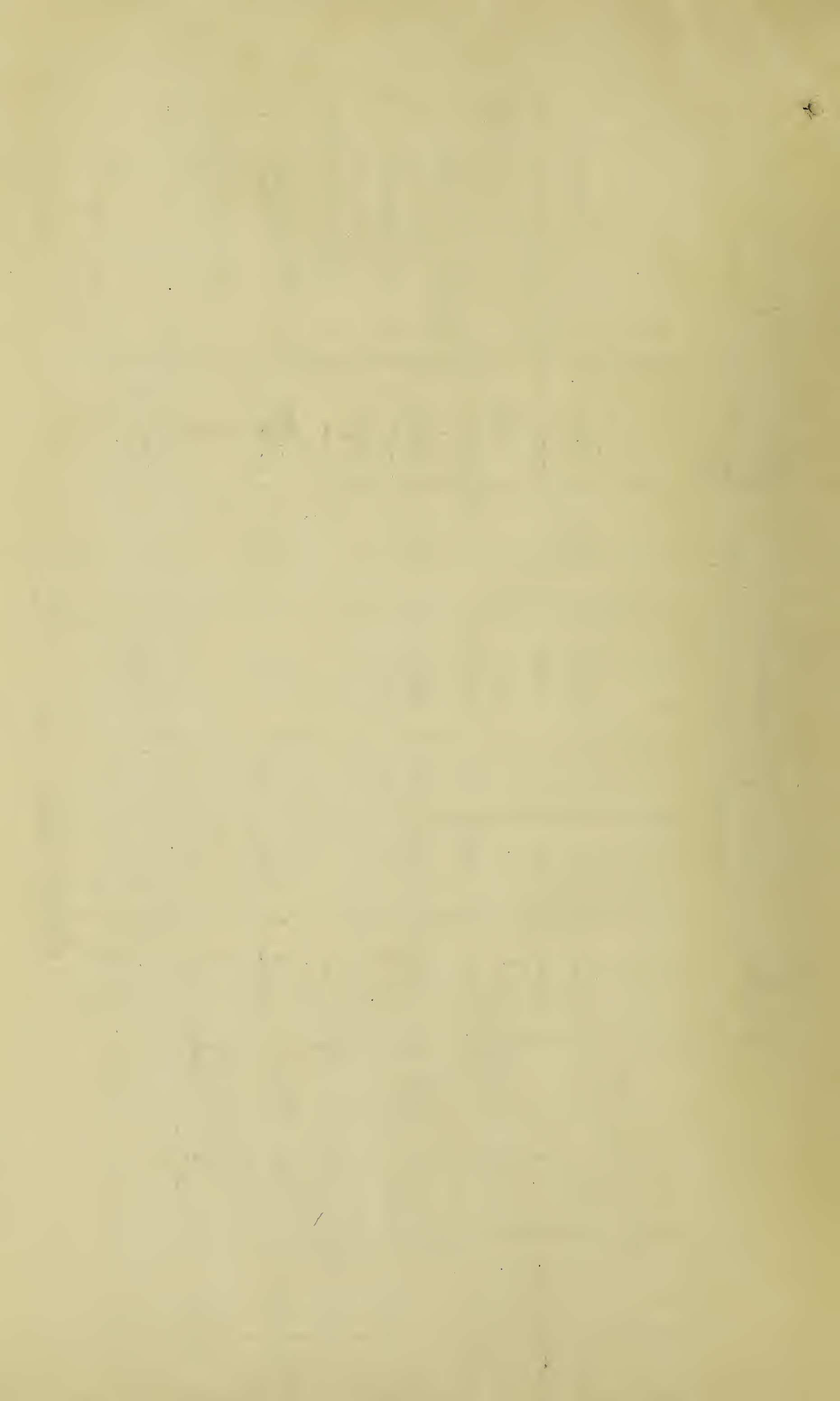
- 4 -

International Detailed List Cause Groups. Numbers.	Jesselton	Mengatal	Buit	Tenghilan	Tuaran	Papar	Beaufort	Weston	Sipitang	Mempakul	Kuala Penyu	Tenom	Pensiangan	Sipulot	Kenangan	Tambunan	Ranau	Bundu Tuhan	Kota Belud	Kudat	Sandakan	Lahad Datu	Simporna	Tawau	Labuan	Estates	Total
750-759 Congenital malformations	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	3	1	-	-	2	-	9
760-762 Birth injuries, post natal asphyxia and atelectases	3	1	-	-	-	-	-	-	-	-	-	2	2	-	1	-	-	-	-	2	5	1	-	2	6	-	25
763-768 Infections of the newborn	7	-	-	-	1	-	-	-	-	-	-	-	-	-	1	3	-	-	2	1	10	2	8	2	1	1	40
769-776 Other diseases peculiar to early infancy & im- maturity unqualified	10	5	19	6	5	17	3	4	16	8	2	3	-	-	7	6	1	11	14	5	60	28	20	35	7	1	293
780-795S Senility without menti- on of psychosis, ill defined & unknown causes	6	12	12	10	17	40	10	7	11	8	18	15	10	5	6	10	27	10	64	10	39	9	5	24	23	-	416
- All other diseases	21	4	-	11	8	53	5	6	11	64	21	2	9	1	16	15	7	10	26	24	77	16	11	10	50	-	478
N800-N829 Fractures, head injuries	-	-	2	-	1	2	1	-	2	-	1	1	1	-	-	1	1	2	3	3	8	1	-	3	-	-	37
N850-N869 & internal injuries	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2
N940-N949 Burns	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
N960-N979 Effects of poisons	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
N990 Drowning	4	-	-	-	4	1	2	-	-	-	-	1	1	-	1	1	-	1	-	2	4	4	-	1	1	-	27
- All other injuries	4	-	1	-	1	-	-	-	-	-	-	9	1	-	-	-	1	1	2	-	-	-	3	1	-	-	24
- Stillbirths	9	2	1	3	16	20	1	7	-	-	-	3	-	-	3	3	6	7	10	10	38	10	2	-	3	-	145
Total Deaths	224	51	75	61	186	327	128	43	102	100	110	151	53	45	124	267	235	139	485	218	605	123	97	181	137	4	4271
Total Births	741	185	226	88	485	860	242	91	173	120	200	277	64	21	170	313	270	296	622	613	156	540	156	64	7408	5	9241

APPENDIX B.

950 MATERNITY AND CHILD WELFARE SUMMARY.

	Jesselton Tuaran	Sandakan	Keningau Tenom	Papar	Kudat	Penampang	Tambunan	Lamag	Labuan	TOTAL
<u>Total Attendances.</u>										
Women	709	1110	3844	276	564	331	71	10	172	7,087
Children	3870	2376	5014	2947	615	1473	98	20	217	16,680
<u>Domiciliary Visits.</u>										
Maternity	147	-	42	46	-	9	3	-	-	247
Ante Natal	53	121	316	56	33	9	113	79	-	780
Post Natal	869	116	209	155	29	129	110	36	-	1,653
Maternity bathing after care	1273	-	393	199	138	33	13	-	-	2,149
Special calls	169	-	230	7	-	1	-	-	-	407
Sick women sent to Hospital	59	6	233	2	39	5	-	-	2	356
" children " " "	118	30	242	2	65	7	-	-	-	405



Recorded Changes in Population by Races.

Races	Total Births	Total Deaths	Natural increase or decrease.	Infant deaths under 1 year.	Immigration.	Emigration.	Increase or decrease by migration.	Total increase or decrease.
European	14	9	+5	3	1550	1365	+185	+190
Eurasian	13	1	+12	-	-	-	-	+12
Chinese	3321	703	+2618	191	4266	3965	+301	+2919
Malay	197	81	+116	32	652	623	+29	+145
Indonesian	168	68	+100	124	1071	728	+343	+443
Indian and Pakistan	82	20	+62	2	411	360	+51	+113
Philippino	20	8	+12	2	2930	3038	-108	-96
Arab	20	4	+16	0	39	19	+20	+36
Cocos Islanders	22	12	+10	0	143	-	+143	+153
Other Non-native	8	2	+6	0	565	428	+137	+143
Total Non-native	3865	908	+2957	254	11627	10526	+1101	+4058
Dusun	2663	1705	+958	355	-	-	-	+958
Murut	271	303	-32	17	-	-	-	-32
Bajau	869	496	+373	126	-	-	-	+373
Brunei	531	233	+298	54	203	285	-82	+216
Suluk	165	66	+99	32	-	-	-	+99
Kedayan	188	90	+98	31	-	-	-	+98
Besaya	173	129	+44	35	-	-	-	+44
Sungei	152	168	-16	57	-	-	-	-16
Tidong	98	40	+58	6	-	-	-	+58
Illanun	70	43	+27	8	-	-	-	+27
Banjar	45	14	+31	6	-	-	-	+31
Idahan	39	27	+12	12	-	-	-	+12
Bugis	19	12	+7	0	-	-	-	+7
Simulul	14	6	+8	2	-	-	-	+8
Kagayan	30	3	+27	2	-	-	-	+27
Tagal	4	13	-9	0	-	-	-	-9
Dumpas	2	5	-3	0	-	-	-	-3
Tutong	12	3	+9	0	-	-	-	+9
Dyak	22	5	+17	3	-	-	-	+17
Native unspecified	9	2	+7	6	658	613	+45	+52
Total Native	5376	3363	+2013	752	861	898	-37	+1976
Grand total	9241	4271	+4970	1006	12488	11424	+1064	+6034

